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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,090	08/30/2005	Michail Tsatsanis	VOY-023US	1123

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EXAMINER	
AHN, SAM K	
ART UNIT	**PAPER NUMBER**
2611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Best Available Copy

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/517,090	**Applicant(s)** TSATSANIS ET AL.
	Examiner Sam K. Ahn	**Art Unit** 2611

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 August 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: 8-12,20-24,32-36 and 45-47.

   Claim(s) objected to: 43 and 44.

   Claim(s) rejected: 3,5-7,15,17-19,27,29-31,39,41,42 and 48-57.

   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

9/6/07

Sam K. Ahn
Patent Examiner

Continuation of 11: does NOT place the application in condition for allowance because: it is not persuasive. Applicants argue that Amrany in view of Polley do not teach the claimed limitations in claims 48,52,53 and 57 because the present application does not measure the interference on each modem signal one-by-one or through use of an exemplary signal. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., determining interference through analysis of the correlation of at least two signals at the same time without an exemplary signal) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims recite reducing interference, but do not recite determining interference. Furthermore, the claims do not recite wherein the exemplary signals, as asserted by the applicants which are used by prior art, are not used.

Amrany teaches a method comprising: creating a communications line with two or more twisted copper pairs of wire in one or more binders (see Fig.2A with plurality of twisted wires for 102-110 in one binder of a bundle); coordinating physical-layer signals across two or more receivers; coordinating the physical-layer signals across two or more transmitters (see CP1 - CPn in Fig.2A communicating signals with CO 114, wherein CO comprising xDSL1 - xDSLn modems, see within 42 in Fig.1); further teaches exploiting measured interference noise values across two or more of said receivers to reduce interference noise in the physical layer signals, wherein the reduced interference noise includes out of domain components of interference noise (wherein the reduced interference noise takes the form closer to a transmitted signal, wherein Amrany teaches that the transmitted signal is derived by subtracting the crosstalk noise from the received signal, note c.8, l.21-24, and further the crosstalk noise includes white noise, note c.8, l.10-18, hence reduced interference noise is performed by pre-processing p(n), note c.8, l.52, wherein p(n) also includes white noise w(n), note equation 2, and wherein one skilled in the art would recognize that white noise is noise out of domain component of interference noise). However, Amrany does not explicitly teach wherein the signals are physical layer signals. Polley teaches a method comprising: creating a communications line with two or more twisted copper pairs of wire in one or more binders (see Fig. 6b having twisted pairs A and B 140 in one binder of telephone subscriber cable); receiving from said two or more twisted pairs across two or more receivers physical layer signals (each of the twisted pairs A and B receiving and transmitting physical layer signals 185 in Fig.1e) that have been coordinated across two or more transmitters (wherein the modem in illustrated in Fig.14a comprising transmitters and receivers communicating with modems on the other side of the twisted pairs A and B). And although Polley further teaches NEXT (near-end crosstalk interferences) cancellation, Polley does not explicitly teach exploiting a correlation between measured interference noise values across two or more of said receivers to reduce interference noise in the physical layer signals. However, Amrany in view of Polley does not explicitly teach exploiting a correlation or comparison between measured interference noise values across two or more of said receivers to reduce interference noise in the physical layer signals. Kantschuk teaches in the same filed of endeavor of twisted pairs of wire in a binder or shared cable (18 in Fig.1) coupling modem pools in both ends of the cable. Kantschuk further teaches exploiting a correlation between measured interference noise values (comparing among A-P disturber modems causing greatest NEXT interference, note col.8, lines 45-48, the measured NEXT interference values note col.7, lines 37-45) across two or more of receivers (receivers in modems of 12 or 10 in Fig.1) to reduce interference noise (applying probe filters to modems with NEXT disturber, hence reduces NEXT interference, note col.8, lines 35-48) in the signals across the twisted pairs. Hence, both Amrany and Kantschuk teach modem pools transmitting and receiving signals and suffering from NEXT interference. Kantschuk further teaches that dynamic allocation of NEXT cancellation filters in the modem pool environment adapts to environment conditions and the physical behavior of copper pairs (note col.2, lines 36-45), wherein one skilled in the art at the time the invention was made would recognize based on the teaching of Polley that the signals across the copper pairs are also physical layer signals. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teaching of Kantschuk in the system of Amrany of applying the NEXT cancellation filters to reduce NEXT interference in the modem pool for the purpose of reducing interference by adapting to environment conditions and the physical behavior of copper pairs (note col.2, lines 36-45). Therefore, prior art teaches the claimed limitations in claims 48,52,53 and 57.

Regarding claims 49-51 and 54-56, applicants assert that Amrany in view of Polley, kantschuk and Ginis do not teach the claimed limitations which recited a unique combination of elements. However, the argument is not persuasive. Please note the last office action of explaining that prior art does teach the claimed limitations. Therefore, the examiner maintains the rejection and maintains the status of claims 43 and 44.